

Permit #: 20013

Date Issued: 2-11-82

County: Atchison

Date Cancelled: \_\_\_\_\_

CONFIDENTIAL UNTIL: \_\_\_\_\_

Date Plugged: 2-22-82

COMMENTS:

OGC FORMS	Date Received
1	
2	
3	2-3-82
3i	
4	
4i	
5	
6	
7	2-22-82
8	
11	
12	
Misc. Form 2	

	TYPE	ID #	Date Received
Logs			
Samples	chip		
	core		
Analyses	water		
	core		

Additional Submitted Data:

geologic tops report

## APPLICATION FOR PERMIT TO DRILL, DEEPEN OR PLUG BACK

APPLICATION TO DRILL ☒ DEEPEN ☐ PLUG BACK ☐NAME OF COMPANY OR OPERATOR Gulf Energy Corporation DATE 1/29/82Bldg 2, Suite 360, 6825 E. Tennessee Ave., Denver, CO 80224

Address

City

State

## DESCRIPTION OF WELL AND LEASE

Name of lease <u>Alma Selk</u>	Well number <u>23-12</u>	Elevation (ground) <u>959'</u>					
WELL LOCATION (give footage from section lines) <u>1980</u> ft. from <u>(N)</u> (S) sec. line <u>660</u> ft. from (E) <u>(W)</u> sec. line							
WELL LOCATION Section <u>23</u> Township <u>66</u> Range <u>41</u>		County <u>Atchison</u>					
Nearest distance from proposed location to property or lease line: <u>660</u> feet		Distance from proposed location to nearest drilling, completed or applied - for well on the same lease: <u>None</u> feet					
Proposed depth: <u>4000'</u>	Rotary or Cable tools <u>Rotary</u>	Approx. date work will start <u>2/14/82</u>					
Number of acres in lease: <u>760</u>	Number of wells on lease, including this well, completed in or drilling to this reservoir: <u>None</u> Number of abandoned wells on lease: <u>None</u>						
If lease, purchased with one or more wells drilled, from whom purchased: Name _____ Address _____		No. of Wells: producing <u>0</u> inactive <u>0</u> abandoned <u>0</u>					
Status of Bond Single Well <input checked="" type="checkbox"/> Amt. <u>\$4,000</u> Blanket Bond <input type="checkbox"/> Amt. <u>      </u> <input type="checkbox"/> ON FILE <input type="checkbox"/> ATTACHED							
Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) use back of form if needed. <u>Required to save entrapment and seal time</u>							
Proposed casing program:		Approved casing - To be filled in by State Geologist					
amt.	size	wt./ft.	cem.	amt.	size	wt./ft.	cem.
<u>250'</u>	<u>8 5/8"</u>	<u>24#</u>	<u>250 sx</u>				
<u>4000'</u>	<u>5 1/2"</u>	<u>14#</u>	<u>150 sx</u>				
I, the undersigned, state that I am the <u>Vice President</u> of the <u>Gulf Energy Corp.</u> (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.							
Signature <u>Kerry J. Kaltenbach</u>							

Permit Number #20013Approval Date 2/14/82Approved By Wallace B. Davis

Note: This Permit not transferable to any other person or to any other location.

Remit two copies to: Missouri Oil and Gas Council  
P.O. Box 250 Rolla, Mo. 65401  
One will be returned for driller's signature☒ SAMPLES REQUIRED☐ SAMPLES NOT REQUIRED

RECEIVED

WATER SAMPLES REQUIRED @ FEB 03 1982

Glenn D. Smith  
MISSOURI OIL & GAS COUNCIL  
and to the driller

Approval of this permit by the Oil and Gas Council does not constitute endorsement of the geologic merits of the proposed well nor endorsement of the qualifications of the permittee.

**MISSOURI OIL AND GAS COUNCIL  
PLUGGING RECORD**

Form OGC-7

Owner <b>Gulf Energy Corporation</b>				Address Bldg 2, Suite 360 6825 E. Tennessee Ave., Denver, CO 80224	
Name of Lease <b>Selk</b>			Well No. <b>23-12</b>		
Location of Well <b>1980' FNL &amp; 660' FWL Section 23 - T66N - R41W</b>				Sec-Twp-Rge or Block & Survey	
				County <b>Atchison</b>	
Application to drill this well was filed in name of <b>Gulf Energy Corporation</b>		Has this well ever produced oil or gas <b>No</b>		Character of well at completion (Initial production) Oil (bbls/day) <b>---</b> Gas (MCF/day) <b>---</b>	
Date Abandoned: <b>2/27/82</b>		Total depth <b>2625'</b>		Amount well producing prior to abandonment. Oil (bbls/day) <b>---</b> Gas (MCF/day) <b>---</b>	
Name of each formation containing oil or gas. Indicate which formation open to well-bore at time of abandonment		Fluid content of each formation		Depth interval of each formation	
				Size, kind & depth of plugs used Indicate zones squeeze cemented, giving amount cement.	
				<b>0'-40' 10 sx</b>	
<b>Lansing - K.C.</b>		<b>No Shows</b>		<b>690' - 1180'</b>	
<b>Cherokee</b>		<b>No Shows</b>		<b>1180' - 1855'</b>	
<b>Mississippian</b>		<b>No Shows</b>		<b>1855' - 2069'</b>	
<b>Hunton</b>		<b>No Shows</b>		<b>2320' - 2625'</b>	
Size pipe		Put in well (ft.)		Pulled out (ft.)	
				Left in well (ft.)	
				Give depth and method of parting casing (shot, ripped etc)	
<b>8 5/8"</b>		<b>243'</b>		<b>0</b>	
				<b>240'</b>	
				<b>---</b>	
				<b>None</b>	
				<b>Packers and shoes</b>	
				<b>RECEIVED</b>	
				<b>MAR 22 1982</b>	
				<b>MO OIL &amp; GAS COUNCIL</b>	
Was well filled with mud-laden fluid? <b>Yes</b>				Indicate deepest formation containing fresh water. <b>Unknown</b>	
<b>NAMES AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE</b>					
Name		Address			Direction from this well:
<b>N/A</b>					
Method of disposal of mud pit contents: <b>Evaporation</b>					
Use reverse side for additional detail		Extreme loss circulation at TD prevented any electric logs to be run			
File this form in duplicate with		and any lower end plugs to be set.			

CERTIFICATE: I, the undersigned, state that I am the Vice President of the Gulf Energy Corp. (company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

*Kary J. Kaltenecker*  
Signature

# DETAIL OF FORMATIONS PENETRATED

Formation	Top	Bottom	Description*
Lansing	690'	---	See Geologist Report
K.C. Base	1100'	1180'	
Cherokee	1180'	1855'	
Mississippian	1855'	2069'	
Kinderhook	2069'	2320'	
Devonian - Hunton	2320'	2501'	
Silurian - Hunton	2501'	---	
TD	2625'		

\*Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures, and recoveries.

## INSTRUCTIONS:

Attach drillers log or other acceptable log of well if available.

This Well Completion or Recompletion report and well log shall be filed with the Missouri State Geologist not later than 30 days after project completion.



1/4 1/4 Line ↘

Section Line

Well Site  
Elev. 959.3

NORTH  
1" = 300'

RECEIVED

FEB 03 1982

W/O. OIL &amp; GAS COUNCIL

W 1/4 Corner  
23-66-41

F R E M O N T C O U N T Y

Project  
Location

STATE OF MISSOURI )  
 ) ss,  
COUNTY OF ATCHISON)

I HEREBY CERTIFY that the above plat and survey were made by me or under my direct personal supervision and that I am a duly Registered Land Surveyor under the laws of the State of Missouri. WITNESS hand and seal this Twenty-ninth (29) day of December, 1981.

Registered Land Surveyor  
Missouri L.S. 1724

MIDLAND ENGINEERING, INC.

Civil Engineers • Surveyors

501 North Market  
1119 Washington

Maryville, MO 64468  
Chillicothe, MO 64601

**T. G. WRIGHT**

*Consulting Geologist*

530 FOURTH FINANCIAL CENTER  
WICHITA, KANSAS 67202

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MAR 04 1982

March 2, 1982

MO. OIL & GAS COUNCIL

GEOLOGICAL WELL REPORT

Gulf Energy Corporation #23-12  
Selk, C NW SW Section 23 - T66N -  
R. 41 W., Wildcat, Atchison County, Mo.  
Contractor: Banner Drilling Company  
Spud: 2-19-82                      Rig #4  
8 5/8" Surface Casing @ 250'  
Completed as a dry hole: 2-27-82  
Total Depth: 2625'

Ms. Kathleen Cox  
Gulf Energy Corporation  
Building 2, Suite 360  
6825 E. Tennessee Ave.  
Denver, CO 80224

Listed below are the pertinent geologic tops and an evaluation of the porosities encountered. No drill stem tests were taken, and the hole was not logged electrically before abandonment. Logging was attempted but failed, due to the bad hole conditions caused by lost circulation problems at total depth, 2625'. A gas detector unit was in operation during the drilling from approximately 300 - 2689'.

Enclosed herewith is a copy of the plotted drilling time log which includes lithology, porous zones, geologic tops and other pertinent data.

ELEVATION

965 Derrick Floor

LANSING-KANSAS CITY  
BASE OF KANSAS CITY  
CHEROKEE SHALE

690 (+ 275)  
1000 (- 35)  
1180 (- 115)

1282-92	Sandstone, fine, clustered, white to light gray, in part with fair porosity, no show, no gas kick. Bottom 5 feet of sand coarser and cleaner, no show.
1505-26	Sandstone, loose to loosely cluster, medium grained to medium coarse. Good porosity, no show, no gas kick.
1624-28	Sandstone, white, clustered, medium grained, clean, porous, no show, no gas kick.

CHEROKEE SHALE (continued)

- 1758-66 Sandstone, white, medium coarse, angular, clustered, clean and porous. No show, no gas kick.
- 1784-96 Sandstone, loose grained, coarse to medium coarse, good porosity, no show, no gas kick.
- 1803-12 Sandstone, clean, coarse, rounded to subrounded, loose grains, good porosity, no show, no gas kick.
- 1832-37 Sandstone, clean, white, clustered, medium fine, porous, no show, no gas kick.

MISSISSIPPIAN LIMESTONE

1855 (- 890)

- 1886-94 Dolomite, buff to brown, sucrosic, good, fine cavernous porosity. No show, no gas kick.
- 1904-19 Dolomite, tan to gray, finely sucrosic, fine cavernous porosity, no show, no gas kick.
- 1954-60 Dolomite, light gray, granular to sucrosic, light gray chert included good porosity, no show, no gas kick.
- 1968-76 Sucrosic, very porous dolomite, very cherty, no show, no gas kick.

KINDERHOOK SHALE

2069 (-1102)

DEVONIAN-HUNTON

2320 (-1355)

- 2350-66 Dolomite - buff to brown, medium crystalline, hard, streaks of good cavernous porosity, evidence of fracturing, no show, no gas kick.
- 2403-08 Dolomite, light gray, medium crystalline to sucrosic, scattered vugular porosity, no show, no gas kick.
- 2415-20 As above - some cavernous porosity.
- 2431-37 Dolomite, brown, dense, some coarsely crystalline with good porosity, no show.
- 2443-52 Dolomite - brown, dense to medium crystalline, scattered coarse vugular porosity, no show.
- 2476-82 As above - evidence of druzy dolomite indicating fractures, no show.

MARCH 2, 1982

SILURIAN-HUNTON

2501 (-1536)

2501-15 Dolomite, light tan, rhombic, very coarsely crystalline, excellent porosity, vein minerals cavernous, very pyritic. Judged to be coarse cavernous. No show, no gas kick.

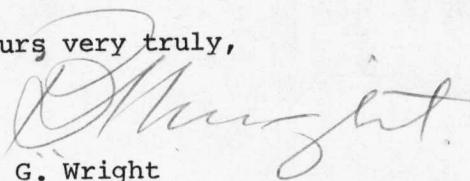
NOTE: Lost circulation at 2569, dry drilled to 2625, no samples. From drilling appears to be similar rocks to TD 2625. Attempts to restore circulation failed. Electric log failed to enter hole below 850'.

TOTAL DEPTH: 2625'.

Conclusion and Recommendations

The only relatively close correlation hole is a dry hole drilled to the Hunton in 1953, a little more than a mile West-Northwest of this hole. Due to the poor log available the correlations are not considered reliable but using the data available it would appear the Selk well is somewhat higher than the dry hole to the west. However, with the lack of "shows" within the section drilled, it was recommended that the well be abandoned as a dry hole, particularly with the severe loss of circulation encountered at total depth.

Yours very truly,



T. G. Wright

TGW:wlf



DRILLING PROGRESS

2-19-82	Spud
2-20	249
2-21	994
2-22	1860
2-23	2140
2-24	2480
2-25	2569
2-26	2620
2-27	2625 TD

BIT RECORD

HUGHES	J-2	249	-	994
HUGHES	J-22	994	2625	T.D.